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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,428	12/22/2000	Naoki Kachi	040679/1191	8035

22428 7590 07/25/2007
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EXAMINER	
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ART UNIT	PAPER NUMBER
1764	

MAIL DATE	DELIVERY MODE
07/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/742,428	KACHI ET AL.	
	Examiner	Art Unit	
	Jennifer A. Leung	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 May 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24,30 and 40-49* is/are pending in the application.

4a) Of the above claim(s) *1-24* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *30 and 40-49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-24,30 and 40-49* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 4, 2007 has been entered.

Response to Amendment

2. Applicant's amendment submitted on May 4, 2007 has been carefully considered. Claims 25-29 and 31-39 are cancelled. Claims 1-24 are withdrawn. Claims 30 and 40-49 are under consideration.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 30, 40, 41 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noda et al. (EP 0 782 880) in view of Kirby (US 5,593,647).

Regarding claims 30 and 40, Noda et al. discloses a catalytic converter comprising a carrier (i.e., a monolithic carrier; page 6, line 54 to page 7, line 48); and a layered structure (i.e., a catalyst-adsorbent layer) disposed on the carrier, the layered structure including:

a HC trap layer disposed on the carrier (i.e., an adsorbent comprising a zeolite; page 5, line 13 to page 6, line 43); and a catalyst system disposed on the HC trap layer (page 3, line 43 to page 5, line 8).

In particular, the catalyst system may comprise a multilayered catalyst system (see page 9, line 54 to page 10, line 6, wherein the carrier is coated with first, second and third layers) including,

a first catalyst layer (i.e., the "Second layer" in Examples 14, 16, 17, 20, 83, 88, 93, 98 and Comparative Example 1 in Tables 4, 5 and 8-10) disposed on the HC trap layer (i.e., the "First layer" in said Examples); and

a second catalyst layer (i.e., the "Third layer" in said Examples) disposed on said first catalyst layer on the HC trap layer;

wherein the first and second catalyst layers (i.e., the "Second layer" and "Third layer") form a dual-layered catalyst system disposed on the HC trap layer such that HC released from the trap layer is purified by both the first and second catalyst layers (i.e., the construction would be similar to that illustrated in Fig. 1(E)); wherein the first and second catalyst layers comprise noble metals, respectively (e.g., Pt, Pd and Rh are used in said Examples; see also page 3, lines 43-46); and wherein the weight per volume of noble metal present in the second catalyst layer (i.e., the "Third layer") is greater than the weight per volume of noble metal present in the first

catalyst layer (i.e., the "Second layer"), and hence, the second catalyst layer is inherently controlled to be active earlier than the catalyst noble metal present in the first catalyst layer. (In each instance of said Examples, the noble metal loading (g/ft3) for the "Third layer" is greater than the noble metal loading for the "Second layer"). It would have been obvious for one of ordinary skill in the art at the time the invention was made to select one of the above Examples for a catalytic converter in the apparatus of Noda et al., on the basis of suitability for the intended use and absent showing any unexpected results thereof, in order to obtain a desired degree of purification for a given exhaust stream.

With respect to the washcoat present in each catalyst layer, the specific amount of washcoat is not considered to confer patentability to the claim because the specific amount of washcoat in each catalyst layer would have been considered a result effective variable by one having ordinary skill in the art. Accordingly, it would have been obvious for one of ordinary skill in the art at the time the invention was made to routinely optimize the amount of washcoat in each catalyst layer to obtain the desired exhaust purification thereof, *In re Boesch*, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980), and it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges merely involves routine skill in the art. *In re Aller*, 105 USPQ 233.

Kirby further evidences the conventionality of the instantly claimed washcoat configuration by teaching a first catalyst layer (i.e., an inner layer) and a second catalyst layer (i.e., an outer layer), wherein the amount of a second washcoat present in the second catalyst layer based on a unit volume of the carrier is smaller than an amount of a first washcoat present in the first catalyst layer based on the unit volume of the carrier (see FIGs. 2A-D, wherein the

amount of washcoat present in the inner layer may be twice that present in the outer layer, or a 2-1 ratio; see also column 1, lines 63-67; column 3, lines 5-10 and column 3, line 45 to column 4, line 5). Kirby controls the amounts of washcoat within each catalyst layer to control the degree of purification achieved by the catalytic converter, as measured by the purification of the various exhaust components, including HC, CO and NOx. One of ordinary skill in the art at the time the invention was made would have been motivated to configure the amount of washcoat present in the second catalyst layer to be smaller than an amount of washcoat present in the first catalyst layer, based on the unit volume of the carrier, because the provision of a smaller amount of washcoat on the second, or outer, catalyst layer relative to the first, or inner, catalyst layer achieves improved emission performance, as taught by Kirby,

Regarding claim 41, a mass ratio of the noble metal present in the second catalyst layer to that in the second washcoat is higher than a mass ratio of the catalyst noble metal present in the first catalyst layer to that in the first washcoat (see Tables 4, 5 and 8-10; see also page 9, line 55 to page 10, line 6).

Regarding claim 43, Noda et al. discloses that the first and second layers (i.e., the "Second layer" and the "Third layer" in the Examples) may each comprise promoters (e.g., cerium; see page 4, line 49 to page 5, line 12; Examples 17 and 20). The specific amount of promoter in each catalyst layer, however, is not considered to confer patentability to the claim because the specific amount of promoter in each catalyst layer would have been considered a result effective variable by one having ordinary skill in the art. Accordingly, it would have been obvious for one of ordinary skill in the art at the time the invention was made to routinely optimize the amount of promoter in each catalyst layer to obtain the desired exhaust purification

thereof, *In re Boesch*, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980), and it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges merely involves routine skill in the art. *In re Aller*, 105 USPQ 233.

4. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noda et al. (EP 0 782 880) in view of Kirby (US 5,593,647), as applied to claims 30 and 40 above, and further in view of Wan (US 5,057,483).

Noda et al. discloses that the catalyst layers may comprise a noble metal such as Rh (see page 3, lines 43-47). Although the Examples cited above do not specifically include an embodiment wherein the second catalyst layer (i.e., the "Third layer") comprises rhodium, disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). Also, a known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to configure the multilayered catalyst system of Noda et al. to comprise rhodium in the second catalyst layer, in order to obtain a desired exhaust purification performance, because the use of rhodium in the second layer of a dual layered catalyst system is conventionally known in the art of exhaust gas purification. Wan further evidences that the use of multilayered catalyst systems having a rhodium component in the outermost layer (i.e., the second coat; column 8, line 35 to column 11, line 35).

5. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noda et al. (EP 0 782 880) in view of Kirby (US 5,593,647), as applied to claim 30 above, and further in view of

Patil et al. (US 5,125,231).

Noda et al. discloses that the honeycomb structure is preferably coated with a heat-resistant metal-oxide on the partition walls and the pore surfaces, i.e., a base coat layer (see page 7, lines 22-23). Although Noda et al. does not state the particular coating material to be selected, it would have been obvious for one of ordinary skill in the art at the time the invention was made to select one of alumina and silica as a main component for the basecoat in the apparatus of Noda et al., on the basis of suitability for the intended use thereof, because alumina and silica are conventionally known the art as suitable materials for forming coatings on catalyst carriers. It is further well known that alumina enables a high specific surface area on carriers for the subsequent coating of catalysts, etc., as evidenced by Patil et al. (see column 5, lines 9-46).

6. Claims 49, 45, 46 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noda et al. (EP 0 782 880) in view of Dettling et al. (US 4,335,023).

Regarding claims 49 and 45, Noda et al. discloses a catalytic converter comprising a carrier (i.e., a monolithic carrier; page 6, line 54 to page 7, line 48); and a layered structure (i.e., a catalyst-adsorbent layer) disposed on the carrier, the layered structure including:

a HC trap layer disposed on the carrier (i.e., an adsorbent comprising a zeolite; page 5, line 13 to page 6, line 43); and a catalyst system disposed on the HC trap layer (page 3, line 43 to page 5, line 8).

In particular, the catalyst system may comprise a multilayered catalyst system (see page 9, line 54 to page 10, line 6, wherein the carrier is coated with first, second and third layers) including,

a first catalyst layer (i.e., the "Second layer" in Examples 14, 16, 17, 20, 83, 88, 93, 98 and Comparative Example 1 in Tables 4, 5 and 8-10) disposed on the HC trap layer (i.e.,

the "First layer" in said Examples); and

a second catalyst layer (i.e., the "Third layer" in said Examples) disposed on said first catalyst layer on the HC trap layer;

wherein the first and second catalyst layers (i.e., the "Second layer" and "Third layer") form a dual-layered catalyst system disposed on the HC trap layer such that HC released from the trap layer is purified by both the first and second catalyst layers (i.e., the construction would be similar to that illustrated in Fig. 1(E)); wherein the first and second catalyst layers comprise noble metals, respectively (e.g., Pt, Pd and Rh are used in said Examples; see also page 3, lines 43-46); and wherein the weight per volume of noble metal present in the second catalyst layer (i.e., the "Third layer") is greater than the weight per volume of noble metal present in the first catalyst layer (i.e., the "Second layer"), and hence, the second catalyst layer is inherently controlled to be active earlier than the catalyst noble metal present in the first catalyst layer. (In each instance of said Examples, the noble metal loading (g/ft3) for the "Third layer" is greater than the noble metal loading for the "Second layer"). It would have been obvious for one of ordinary skill in the art at the time the invention was made to select one of the above Examples for a catalytic converter in the apparatus of Noda et al., on the basis of suitability for the intended use and absent showing any unexpected results thereof, in order to obtain a desired degree of purification for a given exhaust stream.

Noda et al. further discloses that the honeycomb structure is preferably coated with a heat-resistant metal-oxide on the partition walls and the pore surfaces, i.e., a base coat layer (see page 7, lines 22-23). Noda et al., however, is silent as to the base coat layer comprising one of alumina and silica as a main component, and is further silent as to the base coat layer being

thickened at a corner of a cell of the carrier.

Dettling teaches a honeycomb structure that is coated with a base coat layer (i.e., a pre-coating material, such as a material comprising alumina as its main component; see EXAMPLE 1, beginning at column 13, line 8), wherein the base coat layer is thickened at a corner of a cell of the carrier, thereby filling the angular corners of the cell to provide a concave arcuate profile. (see also, column 12, lines 46-58).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to select one of alumina and silica as a main component for the basecoat in the apparatus of Noda et al., on the basis of suitability for the intended use thereof, because the use alumina as a base coat layer for carrying subsequent coatings of catalysts, etc. would have been considered conventional in the art of catalysis, as evidenced by Dettling. Furthermore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to configure the base coat layer to be thickened at a corner of a cell of the carrier in the apparatus of Noda et al., because the thickened base coat layer forms a concave arcuate profile at the corners of the cell, to prevent or at least reduce the accumulation of excess catalytic materials that would otherwise occur in the sharp angular corners of the cells, as taught by Dettling (see column 3, lines 5-31 for discussion of prior art problem).

Regarding claim 46, Noda et al. further discloses that the first and second catalyst layers comprise first and second washcoats, respectively, wherein a mass ratio of the noble metal present in the second catalyst layer to that in the second washcoat is higher than a mass ratio of the catalyst noble metal present in the first catalyst layer to that in the first washcoat (see said examples in Tables 4, 5 and 8-10; see also page 9, line 55 to page 10, line 6).

Regarding claim 48, Noda et al. discloses that the first and second layers (i.e., the "Second layer" and the "Third layer" in the Examples) may each comprise promoters (e.g., cerium; see page 4, line 49 to page 5, line 12; Examples 17 and 20). The specific amount of promoter in each catalyst layer, however, is not considered to confer patentability to the claim because the specific amount of promoter in each catalyst layer would have been considered a result effective variable by one having ordinary skill in the art. Accordingly, it would have been obvious for one of ordinary skill in the art at the time the invention was made to routinely optimize the amount of promoter in each catalyst layer to obtain the desired exhaust purification thereof, *In re Boesch*, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980), and it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges merely involves routine skill in the art. *In re Aller*, 105 USPQ 233.

7. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noda et al. (EP 0 782 880) in view of Dettling et al. (US 4,335,023), as applied to claims 49 and 45 above, and further in view of Wan (US 5,057,483).

Noda et al. discloses that the catalyst layers may comprise a noble metal such as Rh (see page 3, lines 43-47). Although the Examples cited above do not specifically include an embodiment wherein the second catalyst layer (i.e., the "Third layer") comprises rhodium, disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). Also, a known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994). Therefore, it would have been obvious for

one of ordinary skill in the art at the time the invention was made to configure the multilayered catalyst system of Noda et al. to comprise rhodium in the second catalyst layer, in order to obtain a desired exhaust purification performance; because the use of rhodium in the second layer of a dual layered catalyst system is conventionally known in the art of exhaust gas purification. Wan further evidences that the use of multilayered catalyst systems having a rhodium component in the outermost layer (i.e., the second coat; column 8, line 35 to column 11, line 35).

Response to Arguments

8. Applicant's arguments with respect to claims 30 and 40-44 have been fully considered but they are not persuasive. Applicants (beginning at page 11, line 3) argue,

> "... the structure of catalytic converter of claim 30 contemplates obtaining not only the desired exhaust purification characteristics but also an increased HC conversion efficiency of HC from an underlying HC trap layer by taking into account the influence of the amounts of the two washcoats present in the two catalyst layers on heat capacity of the respective catalyst layers. That is, the structure of catalytic converter of claim 30 contemplates increasing the HC conversion efficiency by controlling the amounts of the two washcoats present in the respective catalyst layers on a HC trap layer which significantly influences the heat capacity of the respective catalyst layers for allowing the HC released from the HC trap layer to be quickly oxidized. Neither Noda nor Kirby suggests this effect, and claim 30 is not obvious thereover.
>
> ... in the Noda structure the relation between the amount of the washcoat present in the outer catalyst layer and the amount of the washcoat present in the inner catalyst layer is precisely the opposite to that as recited in claim 30. Kirby, which is relied upon in the Office Action to show the relationship between the amount of washcoat in two catalyst layers, merely discloses in column 3, line 53 to column 4, line 2 that the amounts of the washcoats on the inner and outer catalyst layers are controlled in view of the purification characteristics for the exhaust components HC, CO and NOx. Nowhere does

> Kirby disclose or suggest that the amounts of the washcoats on the inner and outer catalyst layers exert such significant influence on heat capacity of the respective catalyst layers to thereby allow quick oxidization of the HC released from an underlying the HC trap layer. Kirby merely discloses improving emission performance generally, not increasing HC conversion efficiency in particular. Kirby does not provide an optimized solution for reducing the HC released from the HC trap layer during engine warm-up operation. In fact, Kirby does not disclose a structure with an HC trap layer, followed by first and second catalyst layers disposed thereon."

The Examiner respectfully disagrees. Though Noda et al. and Kirby may not explicitly comment on the influence of the amounts of the two washcoats on the "heat capacity" of the respective layers, or its effect on the "increased HC conversion efficiency" of the system, the modified apparatus of Noda et al. will inherently exhibit such properties because the modified apparatus of Noda et al. comprises all of the same structural elements as instantly claimed. Please note that *prima facie* obviousness is not rebutted by merely recognizing additional advantages or latent properties present in the prior art, *In re Wiseman*, 596 F.2d 1019, 201 USPQ 658 (CCPA 1979); *In re Baxter Travenol Labs*, 952 F.2d 388, 21 USPQ2d 1281 (Fed. Cir. 1991). The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious, *Ex parte Obiaya*, 227 USPQ 58, 60 (BPAI 1985).

In addition, though the relative washcoat amounts for the first and second catalyst layers, respectively, in the Examples presented in the primary reference to Noda et al. may be "opposite to that as recited in claim 30", this does not constitute a teaching away from other relative amounts of washcoat, since disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442,

169 USPQ 423 (CCPA 1971). And, as further evidenced by Kirby, both the washcoat configuration as disclosed by Applicant and the "opposite" washcoat configuration as disclosed by Noda et al. would have been considered conventional choices to one of ordinary skill in the art. For example, Kirby teaches various washcoat configurations (see FIGs. 2A-2D; column 3, line 45 to column 4, line 4), wherein 1) the amount of washcoat in each layer is equal; 2) the amount of washcoat in the inner layer is greater than the amount of washcoat in the outer layer (i.e., like Applicant's claimed configuration); and 3) the amount of washcoat in the inner layer is less than the amount of washcoat in the outer layer (i.e., like Noda et al.'s configuration). Kirby, in particular, teaches that the washcoat configuration 2) is preferred for its improved emission performance.

Lastly, Applicant argues, "Kirby does not disclose a structure with an HC trap layer, followed by first and second catalyst layers disposed thereon." However, this argument is not found persuasive, as Kirby was merely relied upon as a secondary reference to teach the claimed feature of a greater amount of washcoat for the inner catalyst layer relative to the outer catalyst layer. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Furthermore, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

9. Applicant's arguments (beginning at page 12, second paragraph) with respect to claims 49 and 45-48 have been considered, but they are moot in view of the new ground(s) of rejection, made in view of the newly applied prior art to Dettling.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Leung whose telephone number is (571) 272-1449. The examiner can normally be reached on 9:30 am - 5:30 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAL

Jennifer A. Leung
July 18, 2007

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